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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,898	01/24/2001	Gagan Lal Choudhury	2000-0095	4222
7590 06/28/2004				
Samuel H. Dworetsky AT&T Corp. P.O. Box 4110 Middletown, NJ 07748-4110			EXAMINER SHEW, JOHN	
			ART UNIT 2664	PAPER NUMBER

DATE MAILED: 06/28/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/768,898

Applicant(s)

CHOUDHURY ET AL.

Examiner

John L Shew

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8,12-13,16-17 and 19 is/are rejected.
- 7) ☒ Claim(s) 9-11,14-15 and 18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

Claim Objections

1. Claim 18 is objected to because of the following informalities:

The term "about" in claim 18 is a relative term which renders the claim indefinite. The term "about" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5-7, 12 and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Saito et al.

Claim 1, Saito teaches a method for recovering a network (column 1 lines 8-12) referenced by self-healing communications network, comprising selecting a first trunk for recovery (column 2 lines 2-5, lines 66-67, column 3 lines 1-2) referenced by a segment terminating at a node is recovered, up to a predetermined number of trunks at a given time (column 2 lines 66-67, column 3 lines 1-6) referenced by assignment of a priority to the segment thus a predetermined number of trunks are those segments having identical priorities, until each trunk associated with the first node is selected for recovery (column 3 lines 2-6) referenced inherently by the recovery of all segments when each and every priority level is reached.

Claim 5, Saito teaches selecting a second node for recovery (column 3 lines 55-59, column 4 lines 1-8) referenced by the recovery delay periods of a network node being different from the delay periods of other network nodes inherently means a second node is recovered.

Claim 6, Saito teaches selecting a first trunk associated with the second node for recovery (FIG.1, column 2 lines 14-26) referenced by the different assigned delay times for recovery between nodes inherently means a second node will start recovery on a trunk associated with it, allowing the first trunk of the second node to recover (column 1 lines 40-44) referenced by the fault restoration activity, selecting further trunks associated with the second node for recovery up to a second predetermined number of

trunks at a given time (column 2 lines 66-67, column 3 lines 1-6) referenced by assignment of a priority to the segment thus a predetermined number of trunks are those segments having identical priorities, until each trunk associated with the second node is selected for recovery (column 3 lines 2-6) referenced inherently by the recovery of all segments when each and every priority level is reached.

Claim 7, Saito teaches including determining a sequence for recovering each of the plurality of nodes in the network (column 3 lines 55-59, column 4 lines 1-8) referenced by the recovery delay periods of a network node being different from the delay periods of other network nodes inherently means there is a sequence to each node's recovery based on the different timer delay values for each node.

Claim 12, Saito teaches a method for recovering a network (column 1 lines 8-12) referenced by self-healing communications network, comprising determining a sequence for recovering each node in the network (column 3 lines 55-59, column 4 lines 1-8) referenced by the recovery delay periods of a network node being different from the delay periods of other network nodes inherently means there is a sequence to each node's recovery based on the different timer delay values for each node, determining a respective time interval between initiating recovery of the network node (column 3 lines 55-59, column 4 lines 1-8) referenced by delay periods for initiation of fault recovery being different for each network node.

Claim 16, Saito teaches selecting a first trunk associated with a first node in the node recovery sequence (column 2 lines 2-5, lines 66-67, column 3 lines 1-2) referenced by a segment terminating at a node is recovered.

Claim 17, Saito teaches including up to N trunks associated with the first node for simultaneous recovery after the first trunk has recovered (column 2 lines 66-67, column 3 lines 1-6) referenced by assignment of a priority to the segment thus a predetermined number of trunks are those segments having identical priorities so after priority 1 segment is recovered all priority 2 segments will be recovered with N being the number of segments assigned to priority 2.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4, 8, 13 and 19, are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito as applied to claims 1, 5-7, 12, 16 and 17, above in view of Segal et al.

Claims 2, 3, 4 and 19, Saito teaches a self-healing network based on delay time periods. Saito teaches randomly selecting the first trunk from a plurality of trunks associated with the first node (column 2 lines 66-67, column 3 lines 1-6) referenced by trunks with same priorities are recovered at the same time implies randomly among them. Saito teaches selecting further trunks for recovery (column 2 lines 66-67, column 3 lines 1-6) referenced by trunks with different priorities are recovered at a later time inherently selects further trunks for recovery. Saito teaches including up to N trunks associated with the first node for simultaneous recovery after the first trunk has recovered (column 2 lines 66-67, column 3 lines 1-6) referenced by assignment of a priority to the segment thus a predetermined number of trunks are those segments having identical priorities so after priority 1 segment is recovered all priority 2 segments will be recovered with N being the number of segments assigned to priority 2. Saito does not teach selection of a trunk to form the largest possible subnetwork. Segal teaches selecting sets so as to form a larger possible subnetwork (Abstract lines 4-19, column 5 lines 14-19, column 15 lines 46-61) referenced by partition recovery of a set of nodes and combining group of sets into larger sets with each node performing trunk recovery within the set. Segal teaches the selection of node sets with minimal interference which would be the largest possible subnetwork formation for faster network recovery.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use form a largest subnetwork with minimal interference in accordance to

Segal to the node delay recovery timers of Saito for the purpose of efficient network recovery.

Claims 8 and 13, Saito teaches a self-healing network based on delay time periods. Saito does not teach determining processing time surges due to node recovery. Segal teaches determining processing time surges at each of the plurality of nodes due to recovery of the nodes (column 10 lines 51-55) referenced by the optimal metered rate with a correspondence to processing time due to collisions.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a metered rate inclusive of a processing time determination to establish node subsets for recovery as disclosed by Segal to the node delay recovery timers of Saito for the purpose of faster network recovery.

Allowable Subject Matter

3. Claims 9-11, 14-15 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art search did not disclose staggering nodal recovery while preventing processing time surges from overlapping.

Citation of Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patent 6728205, Finn et al. discloses a method and apparatus for automatic protection switching for a bi-directional link self-healing network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L Shew whose telephone number is 703-305-8708. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to be 'W. Chin', with a long horizontal line extending to the right.

WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600